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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,954	04/24/2001	John Zhu	50P4401.01	5639

36738 7590 04/14/2005

ROGITZ & ASSOCIATES  
750 B STREET  
SUITE 3120  
SAN DIEGO, CA 92101

EXAMINER
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LANIER, BENJAMIN E

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/840,954

Applicant(s)

ZHU ET AL.

Examiner

Benjamin E Lanier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-10,12-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-5,7-10,12-20 and 22-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Article 17.2(a)).

80Y288Xu

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed 13 December 2004 amends claims 1, 4, 10, 18, 19, and cancels claims 6, 11, and 21. Applicant's amendment has been fully considered and is entered.

### ***Response to Arguments***

2. Applicant's arguments filed 13 December 2004 have been fully considered but they are not persuasive. Applicant's argument that Rautila does not disclose location of a client device is not persuasive because Rautila discloses that the base station provides location specific information to a client device depending upon where the client device is located (Col. 2, lines 23-48).

3. Applicant's arguments, filed 13 December, with respect to the Demoff reference have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Ali-Laurila, U.S. Patent No. 6,587,680, in view of Bayeh, U.S. Patent No. 6,098,093.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-5, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ali-Laurila, U.S. Patent No. 6,587,680, in view of Bayeh, U.S. Patent No. 6,098,093. Referring to claim 1-4, Ali-Laurila discloses an IP based wireless network using IPSEC level security between wireless terminals, which meets the limitation of plural client devices and an application component, and network elements (Col. 5, lines 7- 14). The system provides an efficient method for re-establishing an existing security association when a handover event occurs between a new access point, which meets the limitation of plural link terminals, and a mobile terminal (Col. 5, lines 19-25). Authentication of the mobile terminal during handover is achieved by a challenge/response procedure involving authentication keys for both ends of the communication pair that are generated by a key management protocol, which meets the limitation of logic at at least one local link terminal for generating the shared secret. Security associations are also used during the authentication and communication process to avoid the need for a new and different key exchange during each handover (Col. 5, lines 43-50). The system also includes a security protocol that uses a session-dependent dynamic key that is included as a part of the active security associations (Col. 4, lines 56-62), which meets the limitation of receiving IP packets therefrom in respective sessions, at least some IP packets being associated with information unique to the session, each session being associated with a unique shared-secret between a client device and a link terminal communicating therewith, the information being useful in providing data from the application component in IP packet format from the NOC to a client device

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moving relative to the link terminals by providing at least one IP packetized data stream to the client device using a first link terminal and then continuing to provide the data stream to the client device from a second link terminal as the client device moves. Ali-Laurila does not disclose using session names in the communication. Bayeh discloses a system for maintaining sessions in a server environment wherein session IDs are stripped from packets before being forwarded (Col. 10, lines 22-25), which meets the limitation of information including at least one session name, logic at a local link terminal for stripping the session name from messages from a client device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to strip the session IDs from the packets in the IP based wireless system of Ali-Laurila in order to determine if a session has already been created and if not, create a new session as taught in Bayeh (Col. 11, lines 20-26).

Referring to claim 5, Ali-Laurila discloses access points are connected to an external communication network backbone (Col. 6, line 65 – Col. 7, line 2), which meets the limitation of a base station. Other communication devices such as communication stations are typically coupled to the backbone to form communication paths between a mobile terminal and the communication stations directly or indirectly to the network backbone (Col. 7, lines 2-14), which meets the limitation of data centers.

Referring to claim 9, Ali-Laurila discloses a data transmission rate of typically 25 megabytes per second (Col. 1, lines 58-59).

Referring to claim 8, Ali-Laurila discloses in Figure 1 that the mobile devices have an antenna and transceiver (Col. 6, lines 52-54).

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7. Claims 7, 10, 12-20, 22-25, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ali-Laurila, U.S. Patent No. 6,587,680, in view of Bayeh, U.S. Patent No. 6,098,093 as applied to claim 1 above, and further in view of Rautila, U.S. Patent No. 6,549,625. Referring to claims 7, 10, 13-16, 18-20, 24, Ali-Laurila discloses an IP based wireless network using IPSEC level security between wireless terminals, which meets the limitation of plural client devices and an application component, and network elements (Col. 5, lines 7- 14). The system provides an efficient method for re-establishing an existing security association when a handover event occurs between a new access point, which meets the limitation of plural link terminals, and a mobile terminal (Col. 5, lines 19-25). Authentication of the mobile terminal during handover is achieved by a challenge/response procedure involving authentication keys for both ends of the communication pair that are generated by a key management protocol, which meets the limitation of logic at at least one local link terminal for generating the shared secret. Security associations are also used during the authentication and communication process to avoid the need for a new and different key exchange during each handover (Col. 5, lines 43-50). The system also includes a security protocol that uses a session-dependent dynamic key that is included as a part of the active security associations (Col. 4, lines 56-62), which meets the limitation of receiving IP packets therefrom in respective sessions, at least some IP packets being associated with information unique to the session, each session being associated with a unique shared-secret between a client device and a link terminal communicating therewith, the information being useful in providing data from the application component in IP packet format from the NOC to a client device moving relative to the link terminals by providing at least one IP packetized data stream to the client device using a first link terminal and then continuing to

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provide the data stream to the client device from a second link terminal as the client device movies. Bayeh discloses a system for maintaining sessions in a server environment wherein session Ids are stripped from packets before being forwarded (Col. 10, lines 22-25), which meets the limitation of information including at least one session name, logic at a local link terminal for stripping the session name from messages from a client device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to strip the session Ids from the packets in the IP based wireless system of Ali-Laurila in order to determine if a session has already been created and if not, create a new session as taught in Bayeh (Col. 11, lines 20-26). Ali-Laurila does not disclose location-based services being provided by the system. Rautila discloses a wireless communication system wherein location based services are provided to a wireless terminal or device (Col. 2, lines 13-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide location based services in the wireless network of Ali-Laurila in order to provide subscribers with important information about their current location as taught in Rautila (Col. 1, line 34-65).

Referring to claims 12, 22, Ali-Laurila discloses a data transmission rate of typically 25 megabytes per second (Col. 1, lines 58-59).

Referring to claim 17, Ali-Laurila discloses in Figure 1 that the mobile devices have an antenna and transceiver (Col. 6, lines 52-54).

Referring to claim 23, Ali-Laurila discloses that the service can be a subscription service (Col. 1, lines 34-39).

Referring to claims 25, 29, 30, Bayeh discloses that that session id can be stored in a cookie at the user terminal (Col. 3, lines 20-54). It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to strip the session Ids from the packets in the IP based wireless system of Ali-Laurila in order to determine if a session has already been created and if not, create a new session as taught in Bayeh (Col. 11, lines 20-26).

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ali-Laurila, U.S. Patent No. 6,587,680, in view of Bayeh, U.S. Patent No. 6,098,093 as applied to claim 1 above, and further in view of Ladue, U.S. Patent No. 6,070,070. Referring to claim 27, Ali-Laurila discloses an IP based wireless network using IPSEC level security between wireless terminals, which meets the limitation of plural client devices and an application component, and network elements (Col. 5, lines 7- 14). The system provides an efficient method for re-establishing an existing security association when a handover event occurs between a new access point, which meets the limitation of plural link terminals, and a mobile terminal (Col. 5, lines 19-25). Authentication of the mobile terminal during handover is achieved by a challenge/response procedure involving authentication keys for both ends of the communication pair that are generated by a key management protocol, which meets the limitation of logic at at least one local link terminal for generating the shared secret. Security associations are also used during the authentication and communication process to avoid the need for a new and different key exchange during each handover (Col. 5, lines 43-50). The system also includes a security protocol that uses a session-dependent dynamic key that is included as a part of the active security associations (Col. 4, lines 56-62), which meets the limitation of receiving IP packets therefrom in respective sessions, at least some IP packets being associated with information unique to the session, each session being associated with a unique shared-secret between a client device and a link terminal communicating therewith, the information being useful in providing



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data from the application component in IP packet format from the NOC to a client device moving relative to the link terminals by providing at least one IP packetized data stream to the client device using a first link terminal and then continuing to provide the data stream to the client device from a second link terminal as the client device moves. Bayeh discloses a system for maintaining sessions in a server environment wherein session IDs are stripped from packets before being forwarded (Col. 10, lines 22-25), which meets the limitation of information including at least one session name, logic at a local link terminal for stripping the session name from messages from a client device. Ali-Laurila does not disclose using accounting procedures to bill the user for the amount of packets provided. Ladue discloses a cellular phone switching system wherein the billing information is measured by the amount of packets transmitted (Col. 25, line 66 - Col. 26, line 34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the accounting procedures of Ladue in the IP based wireless network of Ali-Laurila in order to provide anti-fraud protection as taught in Ladue (Col. 26, lines 39-44).

9. Claims 26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ali-Laurila, U.S. Patent No. 6,587,680, in view of Bayeh, U.S. Patent No. 6,098,093, in view of Rautila, U.S. Patent No. 6,549,625 as applied to claims 10, 18 above, and further in view of Ladue, U.S. Patent No. 6,070,070. Referring to claims 26, 28, Ali-Laurila discloses an IP based wireless network using IPSEC level security between wireless terminals, which meets the limitation of plural client devices and an application component, and network elements (Col. 5, lines 7- 14). The system provides an efficient method for re-establishing an existing security association when a handover event occurs between a new access point, which meets the limitation of plural link

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terminals, and a mobile terminal (Col. 5, lines 19-25). Authentication of the mobile terminal during handover is achieved by a challenge/response procedure involving authentication keys for both ends of the communication pair that are generated by a key management protocol, which meets the limitation of logic at at least one local link terminal for generating the shared secret. Security associations are also used during the authentication and communication process to avoid the need for a new and different key exchange during each handover (Col. 5, lines 43-50). The system also includes a security protocol that uses a session-dependent dynamic key that is included as a part of the active security associations (Col. 4, lines 56-62), which meets the limitation of receiving IP packets therefrom in respective sessions, at least some IP packets being associated with information unique to the session, each session being associated with a unique shared-secret between a client device and a link terminal communicating therewith, the information being useful in providing data from the application component in IP packet format from the NOC to a client device moving relative to the link terminals by providing at least one IP packetized data stream to the client device using a first link terminal and then continuing to provide the data stream to the client device from a second link terminal as the client device moves. Bayeh discloses a system for maintaining sessions in a server environment wherein session IDs are stripped from packets before being forwarded (Col. 10, lines 22-25), which meets the limitation of information including at least one session name, logic at a local link terminal for stripping the session name from messages from a client device. Rautila discloses a wireless communication system wherein location based services are provided to a wireless terminal or device (Col. 2, lines 13-18). Ali-Laurila does not disclose using accounting procedures to bill the user for the amount of packets provided. Ladue discloses a cellular phone switching system

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wherein the billing information is measured by the amount of packets transmitted (Col. 25, line 66 - Col. 26, line 34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the accounting procedures of Ladue in the IP based wireless network of Ali-Laurila in order to provide anti-fraud protection as taught in Ladue (Col. 26, lines 39-44).

*Conclusion*

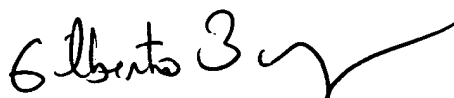
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E Lanier whose telephone number is 571-272-3805. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Benjamin E. Lanier



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